



MANUFACTURING CAPABILITY AT THE FRONTIERS OF SUSTAINABILITY

Building the Future Through the Eyes of an Industrial Company

Lande Industrial Metal Products Inc. | 2024 Sustainability Perspective



Leading Architecture for Next-gen Data Enclosures

A World in Rapid Transformation

The world is changing faster than ever before. The climate crisis, resource scarcity, intensifying regulatory pressures, and increasingly conscious consumers have moved sustainability far beyond "good intentions" — it has become a fundamental criterion for corporate existence. Globally, 72% of consumers are willing to pay more for sustainable products.

As the EU's Corporate Sustainability Reporting Directive (CSRD) raises the bar on transparency, the Carbon Border Adjustment Mechanism (CBAM) enters its definitive regime in 2026, directly impacting the iron and steel sector. As a Turkish industrial company at the heart of this transformation, at Lande we believe change is not merely a challenge — it is an extraordinary opportunity.

Key Axes of the Global Sustainability Agenda

- **Tightening ESG Regulations:** The EU's CSRD expands the scope of companies required to report ESG performance and mandates more detailed disclosures. Combating greenwashing has moved to the top of the regulatory agenda.
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 - **The Rise of the Circular Economy:** One of 2026's most defining trends: circularity becoming an inseparable part of design and operational strategy. From material selection to product lifecycle planning, this approach is no longer "nice to have" — it is non-negotiable.
 - **The Digital Product Passport (DPP) Era:** Under the EU's Ecodesign for Sustainable Products Regulation (ESPR), the Digital Product Passport (DPP) is defined as the new identity document ensuring transparency and traceability throughout a product's lifecycle. Mandatory for certain product groups from 2027, the system is expected to be operational by mid-2026.
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 - **CBAM's Definitive Regime:** Turkey's largest trading partner, the EU, will require certificates for embedded emissions in carbon-intensive imported goods from 2026. With nearly 40% of Turkey's steel exports directed to the EU, this mechanism directly concerns our sector.
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Hand in Hand with Nature, **Trust the Future**

"Every touch we make leaves a mark on our world. By joining hands with nature, let's build a greener and more livable future together!"

In 2024, we published our third sustainability report, aligned with GRI standards. The report covers environmental, social, and governance (ESG) activities carried out between January 1 and December 31, 2024, through a holistic lens.

In preparing the report, we emphasised one key point: sustainability is not an add-on activity for us — it is the natural extension of our quality management approach. With rational engineering principles, a culture of continuous improvement, and a science-based management philosophy, we placed circularity, energy efficiency, and integrated management systems at our core.

Carbon Footprint: Commitment in Numbers

The numbers substantiate this commitment. Our corporate carbon footprint stood at 4,920 tCO₂e in 2022, declined to 4,220 tCO₂e in 2023, and further fell to 4,041 tCO₂e in 2024 — a 21.8% reduction against our base year.

Our normative carbon footprint — the greenhouse gas emissions per tonne of product manufactured — decreased by 18% compared to the previous year. Our three-year target was a 10% reduction; we exceeded it by a wide margin.

Year	Carbon Footprint (tCO ₂ e)	Change
2022 (Base Year)	4,920	—
2023	4,220	▼ 14.2%
2024	4,041	▼ 21.8% (vs. base year)

T.R.O.Y.A: Turkey's First DPP-Certified Data Centre Cabinet

This is precisely where Lande's pioneering step comes into play. The T.R.O.Y.A series of next-generation data centre cabinets we have developed holds the distinction of being the first data centre cabinet in Turkey to receive a Digital Product Passport (DPP).



- **Product Longevity:** A service life exceeding 30 years — guaranteeing long-term investment security
- **Full Circularity:** 100% recyclable as steel scrap; recycled content ratio of 21.10%
- **Low Carbon Footprint:** Approximately 0.357 kg CO₂e — among the lowest in the industry
- **REACH Compliance:** Contains no hazardous substances; can be cut, welded, and easily repaired
- **Load Capacity:** 2,500 kg static, 1,500 kg dynamic; seismic resistance
- **Thermal Management:** 80% perforation on front and rear panels; optimised cooling and low PUE values
- **Security:** Multi-point locking; electronic and mechanical lock options
- **Smart Infrastructure:** Intelligent PDU, environmental monitoring (temperature, humidity, water leakage), fire detection/suppression

T.R.O.Y.A's DPP maintains full transparency on everything from raw materials and carbon footprint to chemical composition and lifecycle data. This passport is not merely a compliance tool — it is a strategic competitive advantage that communicates: 'We know what we manufacture, and we share it openly.' Lande is already prepared for the DPP system the EU will mandate in 2027.

Today, the T.R.O.Y.A series is the crystallisation of over 30 years of accumulated expertise, R&D strength, and sustainability vision. With a service life exceeding 30 years, 100% recyclability, a Digital Product Passport, and a minimal carbon footprint, we are defining what next-generation data centre infrastructure should look like.

Green Route: Reducing the Carbon Footprint in Logistics

Sustainability must be managed not only on the production line, but throughout the entire journey a product takes to reach the customer. Through our "Intermodal Transport" strategy, we prioritise consolidating shipments via environmentally friendlier modes — rail and sea — rather than individual truck transport.

Across three different routes from Eskişehir, using consolidated intermodal shipments, we achieved a reduction of approximately 32 tonnes of CO₂e in just 32 deliveries. Trial runs will be scaled up in 2025 with observed results; from 2026, successful outcomes will be consolidated and shipment ratios increased. This is the tangible expression of our "green route" principle: every shipment is not merely a delivery — it is a carbon reduction opportunity.



Embodied Carbon: Transforming the Supply Chain

Our carbon management perspective extends beyond our own operations. In 2024, we completed our first CBAM reporting and successfully finalised embedded carbon footprint calculations. We requested that our suppliers designate a Sustainability Officer; for three years we have been working to develop our critical suppliers on sustainability matters.

Environmental performance now carries equal weight to technical quality in our supplier selection process. Firms holding ISO 14001, ISO 45001, ISO 50001, and ISO 14064 certifications are preferred; suppliers that do not meet the required standards are excluded, as they would increase the embedded carbon footprint of our products. This is the discipline of choosing "most sustainable" over "cheapest" in the supply chain.

Water Footprint: Managing the Invisible Resource



Water footprint management — Lande factory operations

In 2024, we completed our first corporate water footprint assessment. Total water footprint was determined at 29,363 m³/year; 73% comprises blue water and 27% grey water footprint. Water footprint intensity per tonne stands at 5.7 m³/tonne; per person, at 93.8 m³/person.

To protect water resources, we installed a triple-filter set for process waste; work is ongoing to eliminate unnecessary water consumption within the facility. Even our lunch menus are designed with water footprint values in mind to reduce food-related virtual water consumption. Yes — sustainability is managed at this level of detail.

Energy Efficiency: From Halogen to LED, From Compressors to Optimisation

Inefficiencies identified through our energy audit were systematically addressed. Replacing halogen lamps with LEDs delivered a 60.8% reduction in lighting energy consumption. Burner calibrations ensured more efficient natural gas combustion; the highest energy-consuming compressor was placed on a balanced operating schedule.

In alignment with the EU's Fit for 55 package, we are targeting at least a 55% reduction in carbon emissions by 2030. This is not merely a target — it is a roadmap underpinned by concrete actions: energy audits, process optimisation, LED conversion, and intermodal transport.

People-Centred Sustainability

Sustainability is not only about the environment and energy — it is also about people. Between 2021 and 2024, the proportion of women in senior management rose from 18.37% to 23.40%. Our zero-tolerance policy on child labour and migrant labour applies equally to our suppliers.

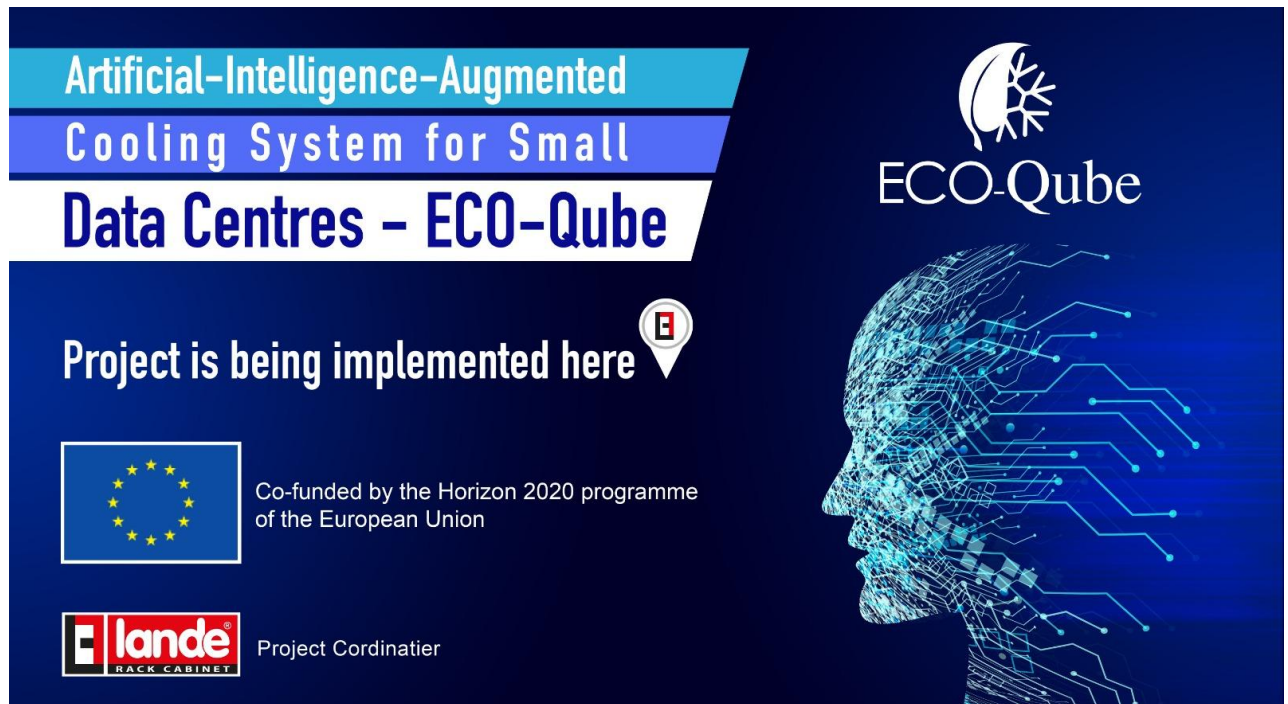
The work accident frequency rate declined from an average of 53 in 2022 to 24 in 2024, with a 74% improvement in accident-related reportable days. As an animal-friendly facility, our factory grounds provide shelter, kennel spaces, veterinary services, and regular feeding for stray animals. Sustainability means respect for all living beings.

Over 20 ISO Certifications: Not Words, But Evidence

Lande's commitment to sustainability is documented through more than 20 international certifications — each a tangible proof of commitment across a different domain:

Certification	Scope
ISO 9001	Quality Management System
ISO 14001	Environmental Management System
ISO 45001	Occupational Health & Safety
ISO 50001	Energy Management System
ISO 27001	Information Security Management
ISO 14064	Greenhouse Gas Reporting
ISO 14067	Carbon Footprint Calculation
ISO 14046	Water Footprint
ISO 20400	Sustainable Procurement
ISO 28001	Supply Chain Security
ISO 37001	Anti-Bribery Management
SA 8000	Social Accountability

From ECO-Qube to T.R.O.Y.A: The DNA of Innovation

A promotional banner for the ECO-Qube project. The background is dark blue. On the left, there are three horizontal bars in light blue, dark blue, and white, containing the text 'Artificial-Intelligence-Augmented', 'Cooling System for Small', and 'Data Centres - ECO-Qube' respectively. Below these, a white location pin icon contains a red 'E'. To the left of the pin is the text 'Project is being implemented here'. Below this is the European Union flag and the text 'Co-funded by the Horizon 2020 programme of the European Union'. At the bottom left is the Lande Rack Cabinet logo and the text 'Project Coordinator'. On the right side, there is a stylized white logo of a head with circuitry, and the text 'ECO-Qube' in white. The background also features a large, faint image of a human head profile composed of circuitry and data points.

ECO-Qube — Turkey's first multi-partner Horizon 2020 project, coordinated by Lande

The roots of our sustainability journey run deep. In 2019, we became the first and only company from Turkey to endorse the EU Code of Conduct for Data Centres.

In 2020, through the ECO-Qube project funded by the European Commission, we set out to improve energy efficiency in small data centres using AI-powered cooling and energy management systems. Executed with 11 companies from 6 countries under Lande's coordination, this project became the first multi-partner Horizon 2020 project to be coordinated from Turkey.

Looking Ahead: 2027 Targets

Sustainability is not a destination — it is a journey of continuous improvement. Among our targets set for the 2024–2027 period:

- **Carbon:** At least 55% reduction in emissions by 2030 under the Fit for 55 framework
- **DPP:** Extending the Digital Product Passport across our full product portfolio; full readiness for the EU's 2027 mandate
- **Green Logistics:** Increasing intermodal shipment ratios to further reduce logistics emissions
- **Gender Equality:** Raising the proportion of women in senior management to 25%
- **Supply Chain:** Bringing all critical suppliers up to green supply chain standards

"The Presence of Everything, the Absence of Carbon — That Is What Wins."



As a company exporting to 102 countries, producing 119,616 cabinets annually across 20,000 m² of manufacturing space, and creating value for its sector with 313 employees, we know: true competitiveness will increasingly be measured by how small you can make your carbon footprint.

From the Digital Product Passport to green-route logistics, from embedded carbon management to water footprint calculations, every step taken is a concrete realisation of our "less resource, more value" principle. Sustainability is no longer a choice — it is an obligation. But we do not see it as an obligation — we see it as an opportunity. And we will continue carrying that opportunity from Eskişehir to the world.

LANDE ENDUSTRIYEL METAL URUNLER SAN VE TIC AS

LANDE ENDUSTRIYEL METAL URUNLER SAN VE TIC AS has earned a **Committed Badge** in their **EcoVadis** assessment, which is a recognition of their good performance as per the EcoVadis assessment methodology. [Learn more about EcoVadis Medals & Badges.](#)

[EcoVadis](#) is recognized globally for trusted business sustainability ratings.



valid through **Mart 2027**

About LANDE:

Lande is a global designer, manufacturer and supplier of 19" rack cabinets and enclosures, providing standard mass production as well as fully customized solutions engineered to each customer's technical specifications. Serving; Data Center, Network, Security & Surveillance, Smart Cities and Telecom Infrastructure industries.

Lande designs and manufactures a wide range of rack cabinets and enclosures, including floor-standing, wall-mount, pole-mounted and direct-mount outdoor models. Our products are built for Data Center, Network, Security & Surveillance, Smart Cities and Telecom Infrastructure applications, and are available in protection levels from IP20 to IP66. We serve both large-scale standard orders and customer-specific projects requiring production based on technical specifications.

Lande is the market leader in Türkiye and its region in this product segment and ranks among the country's top 100 exporters. All products are manufactured in certified facilities, using high-quality materials and sustainable production methods. Our in-house R&D team, with 30 years of industry experience, continuously improves our products and processes to meet international market requirements.

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